## ABSTRACT OF THE DISCLOSURE

A waveguide carrier is located within a carrier tube, and an optical waveguide extends lengthwise in a longitudinal direction within the waveguide carrier. The waveguide carrier is made up of a first carrier body having a first principal surface and a second carrier body having a second principal surface which confronts the first principal surface. The first principal surface has a first groove which extends lengthwise in the longitudinal direction, and the second principal surface has a second groove which extends lengthwise in the longitudinal direction. The first and second grooves are aligned with one another to define an elongate cavity which extends lengthwise in the longitudinal direction, and the optical waveguide is contained within the elongate cavity. The first and second carrier bodies may be fabricated by etching of one or more surfaces of a silicon wafer.